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BARTON-UPON-HUMBER URBAN DISTRICT COUNCIL.

ANNUAL REPORT

of the

MEDICAL OFFICER OF HEALTH

and

Annual Report of the Public Health Inspector

1958



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Vice-Chairman - Councillor E. Goodhand.

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June, 1959.

Mr. Chairman, Mrs. Goddard, Gentlemen,

It is customary for reports on the health of the district to be, in fact, reports on the amount of disease therein. This is because disease is something which can be measured and recorded easily whereas health is far more difficult to define and record. Our aim, as a public health authority must be to take all steps possible to promote health in the district. It therefore seems desirable for us first to consider what, in fact, we mean by health, and how it may be promoted.

When the World Health Organisation was formed after the war all the nations joining it agreed to accept certain principles. Among these was this definition of health:- "Health is a state of complete physical, mental and social well being, and not merely the absence of disease or infirmity. The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition." Unfortunately no-one has yet devised a way in which true health can be measured, and most people think of health only as the absence of disease. Such a concept, which completely disregards such factors as our degree of immunity to infections, our emotional and social adjustment, and our ability to adapt ourselves to changing environmental conditions, falls far short of modern requirements.

Happiness is related to social and emotional adjustment, and is of more importance to man than physical health. A person handicapped by physical infirmity may be a happy and useful citizen. Such a person is far more fortunate than one who is physically fit but so depressed as to be unable to "pull his weight" in society. Without mental health, a fit body is of little value. The promotion of mental health is therefore of the greatest value to the community.

Much mental ill health has its origins in the childhood experiences of the patient. Although there are almost certainly other environmental and also genetic factors involved in the aetiology of mental illness there can be no doubt that experiences in early childhood are an important factor. It has been shown that for satisfactory development of personality it is necessary for a child to enjoy the constant love of one person during the early years of life. In our society that person is the mother. It is the mother who satisfies every need of the newborn baby. Feeding at the breast satisfies the baby's need for food and for affection, and as time goes on

the baby first learns how to establish relationships with other people from the relationship which he has established with his mother. Studies of children who have been brought up in institutions, and who have been deprived of this constant relationship with their mother or mother substitute have shown that these children are very backward compared with normal children. Not only do they fail to make adequate personal relationships with other people, but they also fail to develop the normal powers of abstract thought. The resulting handicap may last a life-time, for it appears that unless a normal home life is restored within a short time the effects of deprivation are permanent, and treatment is extremely difficult and often ineffective.

As a child grows older he becomes a more independent person. Having acquired a robust personality and the power to make personal relationships as a result of good home relationships, he becomes progressively more immune to the effects of maternal deprivation. By the age of 6 or 7 years most children can withstand periods of separation without any lasting harm resulting, and after the age of 10 should withstand even permanent separation. From the age of a few months to the age of 5, however, the results of separation are most grave, being generally more serious the younger the child. It appears that just as the body cannot grow and develop without food, so the mind cannot develop without love.

Since we have all to live in society with other people, our capacity for establishing relationships with others is of basic importance. It is the fundamental part of our social and emotional adjustment. If this capacity is not properly developed a person will either be unable to marry, or will not form an adequate relationship with the spouse. The effects of bad personal relationships in the home will in turn result in any children of the partnership being deprived of a satisfactory home life.

Figures published in the Monthly Bulletin of the Ministry of Health dated September, 1958, show that in all social classes the incidence of mental illness necessitating the admission of a person for the first time to a mental hospital were eight times higher among the unmarried than among those who had ever been married. Since married people have greater responsibilities than the unmarried one might expect the resulting stress to put them at a disadvantage. Since the figures relate to persons over the age of 20 and the majority of admissions to mental hospital take place between the ages of 35 and 65, one cannot explain the excess of mental disease among the unmarried as being due to the disease supervening before the age of marriage. It must therefore be postulated that either marriage itself prevents mental illness, or else some factor which causes mental illness also reduces a person's chances of marrying. A childhood deprived of adequate maternal care is such a factor.

The effects of separating mother and child have been widely accepted in recent years and enlightened authorities are endeavouring to the best of their ability to prevent these tragedies, and where this is not possible to mitigate their effects. The type of care provided by County Councils is being reorganised in an attempt to provide conditions more nearly approaching the normal home. A change of the "mother figure" from the natural mother to a substitute, however, is still harmful to a young child, and any form of care which a children's home can provide is therefore a very poor substitute for a normal home.

Hospitals are now being encouraged to permit unrestricted visiting of sick children by their mothers and in some cases arrange to admit mother and child together in order to prevent separation. This is a step in the right direction, but since many mothers have more than one child such a scheme does not really solve the problem. Unfortunately the hospital authorities, concerned as they are only with the sick individual, have not yet realised that equal harm may result when it is the mother who is ill, and still fail to permit young children to visit their mothers in hospital!

It has been shown that it is the children below the age of 5 who suffer most from separation, but since we are concerned with mental development it must be apparent that it is "mental age" rather than "chronological age" which should be the criterion. Since "problem families" tend to be of below average intelligence the "mental ages" of the children are commonly a year or so below their chronological ages. It is therefore unfortunate that when a family has to be taken into care the children over the chronological age of 5 are not permitted to remain with their mother, but are taken to a children's home. During the course of 1958 I had occasion to take rather unusual measures to prevent the splitting of a family in this way, by securing their return to unfit premises from which they had been evicted for non-payment of rent. Although this action displeased most members of the Council, and led to further controversy, it was the only practicable method of avoiding the break-up of this family. Until a proper scheme for the provision of "intermediate accommodation" can be provided, and the Council begins to co-operate with the County Council to secure the rehabilitation of families of this type, difficulties like this are bound to crop up from time to time. I therefore commend for your attention once more the offer of the County Children's Officer and the County Welfare Officer to meet the Council and discuss a scheme to deal with this and other similar families.

Intelligence is determined chiefly by hereditary factors. Some people are fortunate enough to inherit a good brain, others are less fortunate. Four people out of every hundred are born with less than three-quarters of the intelligence of the average

man. Such people through no fault of their own are unable to cope with problems which those who are more fortunate scarcely notice. Other people, as a result of disease or injury may develop mental handicaps. A few who have normal level of intelligence may be called upon to face problems which are beyond their capacity. Others, as a result of faulty upbringing, are emotionally disabled from making decisions. All of these people are handicapped and may be unable to help themselves in situations where most people can manage quite well. If conditions are favourable they may lead happy and successful lives, but in unfavourable conditions they fail. If successful, their children have improved prospects of success, having been brought up in an atmosphere of security. If unsuccessful their children may be predisposed to failure by living in an atmosphere of constant anxiety. It is from this handicapped section of the population that the "Problem Families" are recruited. They tend to live under appalling conditions, to fail in employment and so have only very meagre incomes. They tend to have larger than average families, with the result that the strain on the mother during the reproductive years may be very great. It has been shown that many of these families can, by means of adequate social help and support, be rehabilitated and eventually turn out very well. If no attempt is made to assist them, however, it is likely that they may give rise to even more such families in the next generation. Since those who fail tend to become a burden on the community, living on National Assistance and requiring a great deal of attention by medical and social agencies, there are financial reasons as well as medical and sociological ones for assisting such families.

The first way in which this Council should help families of this type is by moving them into better houses than the slums they occupy. I regret that this year the Council has demonstrated its lack of understanding of these considerations, and, in spite of recommendations from the Health Committee, refused to rehouse a family from a house on which a Closing Order was placed. There is considerable prejudice against letting Council houses to tenants who may appear a bad risk, and the effects of this could be eliminated if the recommendation of the Central Housing Advisory Committee regarding non-disclosure of applicants names when allocating tenancies were adopted. If the Minister of Housing made adoption of this method of considering cases on their merits obligatory, a great step forward would be achieved.

The arguments against letting Council houses to problem tenants are strong. Many people feel that it is unjust to give more consideration to those who have done nothing to help themselves, than to those who make the best of their present circumstances. They also consider it a waste of public money to build expensive houses and then let them to people who might turn them into slums. They naturally prefer to have tenants who they consider likely to pay the rent regularly and who will

require a minimum of supervision. They also feel that it is unfair to tenants of the neighbouring houses to have such families on the Council estate. I confess that years ago I held some of these opinions too. Closer contact with the problem has changed my view, for the more one studies it the less tenable appears this attitude. It is not those who are capable of looking after their own affairs who require assistance, but rather those who are incapable. It is not the private landlords, but the Councils who have the most control over their house property, and who employ officers trained in estate management. It is the Councils who have the power to bring pressure to bear upon unsatisfactory tenants, and who are in a position to give those in need the most help.

We are all anxious to see the general standard of housing in the area improved. If private landlords improve their property this will eventually mean that the Council does not have to build so many Council houses. Landlords are naturally reluctant to spend money on property occupied by problem tenants, and might make more use of improvement grants if their tenants took good care of the property, and paid an adequate rent regularly. Thus not only is it unfair on the private landlords to have to house all the unsatisfactory tenants, but in the long run it results in greater expense for the Councils who have to build more houses as more and more existing dwellings fall into disrepair, and become slums fit only for demolition. Although in theory a house occupied by unsatisfactory tenants should be maintained in good repair, just as any other house, it must be admitted that in practice these houses do deteriorate. Small items of disrepair accumulate, and by the time an inspector visits the premises the cumulative effect is to render the cost of repair too great to be considered "reasonable". In consequence the Council may in due course be faced with the task of making demolition orders upon houses which might, at an earlier stage, have been made fit for a further fifteen or more years at a reasonable cost. There is often more than a grain of truth in the old proverbs. The one which says "A stitch in time saves nine" is no exception.

In years to come it is to be hoped that the national standards of fitness for habitation for dwelling houses will improve. When that happens it may well be that only houses which attain the "twelve point" standard which the improvement grants secure will be considered fit. Those areas where improvement grants have been used to the full will reap a considerable financial benefit when that day dawns.

This is an exciting century in which to live. The application of the scientific method has resulted in more rapid advance than man has ever known. Very recently man has started to apply the scientific method to the study of psychology and sociology. He has started to examine critically his motives,

and the results of his actions in society. Thus at last the penal system is being rationalised. While the need to prevent crime is still of paramount importance, and punishments which can be shown to have a deterrent effect on others are retained, the emphasis has now shifted from the primitive idea of retribution to the more valuable principle of reform. The only virtue of imprisonment a century ago was its deterrent effect. By failing to train and reform the inmates, and making it difficult for them to obtain honest employment afterwards imprisonment only made further offences more certain. This is the "Old Testament" approach of "an eye for an eye", and its effect. At last, however, man has realised that he should learn to love and understand his fellows. The need for research to discover why people behave in an antisocial way and to treat them in such a way that their mental outlook is reorientated is now realised. The aim of the prisons today is reform rather than retribution. One may hope that in due course this will be carried a stage further, so that training in a skilled trade in prison ensures that honest employment is readily obtained subsequently.

When one considers problem families from this point of view, however, the picture is different. The penalty of squalor and discomfort is already paid, and comfortable living conditions reward those who are capable of helping themselves. No penalty can deter those who are incapable of succeeding without assistance from failing in the absence of the necessary help. Removal to institutions results in this area in breaking up the family and sending the children of 5 years and over to children's homes. Since intelligence is genetically determined the mental age of a five year old from a problem family may well be between 3 and 5 years. It is known that separation from mother at that state of mental development predisposes to maladjustment and mental illness. Thus the removal of problem families to institutions is both expensive and harmful. It is in the interests of society to do its utmost to help to upgrade its less satisfactory or successful members. I beg you all to bear this in mind in future when considering these cases.

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All disease is either hereditary or acquired, and may be due to either genetic or environmental factors. Since causation is seldom simple these factors are not mutually exclusive. Although the principle cause of a road accident may be the failure of a driver to slow down at a cross roads, hundreds of other factors are involved. The accident would not have occurred had he arrived at the point a few seconds earlier or a few minutes later, had he not possessed a car, not been making that journey, or had a policeman been on duty at the junction. Everything which contributed to his possession of a car and being in that place at that time and in such a state of mind

that he failed to slow down can be considered to have contributed to the causation of this driver's accident.

In just the same way the causes of disease in man are complicated and not simple. It is because the causes are always multiple that it is difficult to discover and define them, but the very fact that many factors are involved should facilitate prevention. It matters little which link is cut so long as the chain is broken. The chain may be different for every case and our aim must be to locate those links which are common to the most chains and attack them.

Heredity, diet, smoking habits, atmospheric pollution and occupational exposure to chemical carcinogens are all important links in the aetiology of cancer of the lung. These links in turn depend upon supplementary links; for instance a house with a faulty chimney which smokes a lot resulting in heavy pollution of the air in the house might be an important factor, which may account for cases of cancer of the lung among women who do not smoke and who live in the country. Tuberculosis is not due solely to the tubercle bacillus but also to lack of resistance both hereditary and acquired, to contact with an infected person, overcrowded or substandard living conditions, unsuitable diet and many other factors. Many cases may be prevented by improving housing conditions, by vaccination with B.C.G. to give an acquired resistance and by detecting and isolating infectious cases at the earliest opportunity.

The physical environment, that is to say in addition to climate, all those factors such as housing conditions, purity of water, food and air and infestations with vermin and insects, which it is the district Council's duty to control, provides links in the chain of causation of the majority of diseases. The importance of these factors is consequently far greater than is generally realised. Much of the improvement in health which has occurred in this country in the past 150 years has been due to improved living conditions and not to advances in medical science. In many instances diseases were reduced in incidence long before their aetiology was discovered, entirely as a result of environmental improvement. Some diseases have disappeared completely before their nature was ever fully understood, and can never now be investigated. An example of this is the condition which used to be called chlorosis, which was a peculiar form of anaemia common at the turn of the century. It occurred among the girls employed in the basement kitchens of our Victorian ancestors but whether faulty diet, lack of ventilation and solar illumination, type of work or recreational habits were major factors in causing this disease will never be known.

In the same way we may hope to avoid much disease in the future without ever fathoming the causes. If statistical evidence

shows that a disease is common under certain conditions and rare in others, it is reasonable to promote those conditions under which the disease is rare before any definite causal relationship is proven. Where both disease and conditions are due to some common cause which is not eliminated such action will not achieve its object, but may assist in bringing to light the common cause. Since a great many diseases are commoner in the lower social classes than in Social Classes 1 and 2 and one of the main advantages enjoyed by Social Classes 1 and 2 is that of good housing conditions, it is reasonable to hope for a considerable improvement in the health of the less well-to-do members of society as a result of improved housing conditions. Other advantages, formerly available only to the wealthier people are now available to all, and the improved education of the children of today should help to reduce disease in future. Education can make a big contribution towards social adjustment and mental health in addition to propagating hygienic habits and an understanding of dietetics to the housewife of tomorrow. With the near elimination of serious financial need as a result of the "Welfare State" it seems likely that much of the advantage formerly enjoyed by Social Classes 1 and 2 may soon disappear. For this to be achieved, however, the highest endeavours of district Councils in improving housing conditions throughout their areas will be required. However much this may put up the rates the cost is likely to be much lower than that of the medical treatment of illnesses which would be prevented. Medical care today is extremely expensive, but only accounts for a small proportion of the cost to the community of disease. To the cost of treatment itself must be added loss of earnings by the sick, the cost of National Insurance payments, National Assistance, and indirect losses due to disorganisation of industry on account of sickness absence. The illness of one member of an industrial team will affect the productivity of the whole unit. We must, therefore, endeavour to avoid too much parochial concern with the rates and consider instead the national economy. Viewed in this light environmental services yield a far better return for the expenditure incurred than is realised.

Some people may argue that in improving the living conditions of Social Classes 3 to 5 we may run the risk of increasing the incidence of those diseases which are commoner in Social Classes 1 and 2. This, however, is a most unlikely event, for the diseases in question, Poliomyelitis, Leukaemia, Cerebro-vascular disease, Coronary heart disease, hypertension in men and Poliomyelitis, Cancer and Leukaemia in women appear, with the exception of Poliomyelitis, to be more related to other factors such as habits of diet and exercise, and exposure to radiation, than to housing. Since Poliomyelitis should soon fall in incidence as a result of the widespread use of Salk Vaccine, it appears unlikely that any harmful effects would

counter the gains which improved environment has to offer.

We must not be satisfied until every house in the district has a bath, hot and cold running water, a water closet, good food storage facilities — preferably in a refrigerator, good cooking facilities and an efficient heating system in addition to adequate living space well illuminated and ventilated. To achieve this we must encourage the greatest possible use of improvement grants, and when the New Housing Bill becomes law, do all we can to persuade people to take advantage of the new Standard Amenity Grants.

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It is a sad reflection upon our present society that we make so little use of knowledge at present available. Although we still have a lot to discover about the causes of disease there are many illnesses which we know how to prevent, but make no use of this knowledge.

Evidence is now fairly conclusive that cancer of the neck of the womb is common among wives of uncircumcised men but rare in wives of circumcised men. It appears that a substance known as smegma which accumulates in a skin fold of the uncircumcised male has cancer provoking properties. Although scrupulous daily hygiene would probably be as effective as circumcision, it is not easy in our society to persuade men of the need for this, for suggestions such as this provoke an emotional antagonism. Consequently the decline in popularity of circumcision which has occurred since 1950 will be reflected by the end of the century in an increased incidence of cancer of the cervix. There is no sign, however, of a return to popularity of the old practice of circumcision.

Cancer of the breast is less common among women who have breast fed their babies than among those who bottle feed. In spite of this, and the fact that breast fed babies, although commonly smaller, are healthier than bottle fed ones, many women elect to bottle feed their babies for reasons of personal convenience or emotional objection to suckling.

Although we know that vaccination against smallpox is an extremely valuable procedure and that diphtheria immunisation offers an extremely high degree of protection against a killing disease, many parents still fail to take advantage of these measures.

Poliomyelitis is a crippling disease with an appreciable mortality. Vaccination is 80% effective in preventing paralytic disease. Yet the response to the offer of vaccination to

adolescents and young adults has been extremely poor.

Cancer of the lung and chronic bronchitis are both related to tobacco smoking and air pollution due to inefficient coal burning. Yet the national consumption of tobacco does not decline, and any suggestion that the old inefficient open coal fire be replaced by a more innocuous appliance meets strong opposition.

Dental caries, which affects nearly every person in the community at some time, and which causes a vast amount of pain from toothache and some general illness and absenteeism from work could be reduced by 60% in the next generation if we would add fluoride to our water supplies, and could also be reduced appreciably by an improvement in our dietary habits. If less use was made of soft pulpy foods, we reduced our consumption of refined sugar, and we ate more of those foods which require mastication and have a cleaning action on teeth, a considerable benefit would accrue. In view of the national shortage of dentists, which owing to inadequate recruiting will become worse, it behoves us to make a determined attempt to prevent dental disease in the near future.

A high proportion of adolescent girls are developing deformed feet as a result of unsuitable footwear. It is well known that bunions are common in women but rare in men. Many older women are unable to keep their shoes on all day, but have to take them off whenever they get an opportunity. Is it not absurd for young women to pay a penalty of 40 years with painful feet for the dubious advantage of appearing "Smart" in fashionable footwear for a few years? Since deformed feet are ugly they soon fail to look smart in spite of continuing wearing "fashionable" shoes. "Casual" and "Court" shoes only stay on the foot by virtue of gripping the toes. They must, therefore, exert pressure on the toes and tend to cause deformity. Shoes which grip the toes and not the instep should not be worn. It is high time that the arbiters of fashion awoke to their responsibilities and required an instep fastening of some sort as an essential. Even where an instep fastening is provided deformity of toes could result from the use of high heels, for high heeled shoes have soles which form steep inclines. The body-weight acting upon these inclined soles results in a force thrusting the toes into the pointed ends of these shoes. Thus even if the shoes fit perfectly when the wearer is seated, high heeled shoes may cause pressures leading to deformity as soon as the wearer stands up. Instep fastenings would have to be extremely well designed and robust to prevent this, and since such robust fastenings would be out of keeping with a smart looking shoe, are unlikely to be provided.

A survey of feet has been conducted recently and new lasts have been designed for manufacturers to use. Let us hope that

this will result in an improvement in actual shoe shapes. There is a real risk however that, since the feet of the present generation have already been deformed by bad footwear the new last shapes may reflect this. In addition, however well shaped the shoe, casual shoes and high heeled shoes will lead to deformity. Present day "spike" type very slender heels are objectionable on other grounds, for they may cause injury to others if the wearer treads on another's foot. It is high time that such footwear went out of use.

The public may be able to do a little by only buying the better designed shoes. The manufacturers blame the public for the position, but since it is almost impossible to buy a really adequately designed ladies shoe in the shops today, this is not really fair.

Perhaps the real way to bring manufacturers to their senses would be for the girls and women to refuse to buy current unsuitable designs and buy mens or boys shoes instead! If this were done on a national scale, we should soon have the position remedied.

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1958

I regret to inform you that the high stillbirth rate which the district experienced during 1956 and 1957 persisted in 1958. The rate of 59.4 experienced by Barton-on-Humber compares most unfavourably with the national figure of 22. In an area as small as this a high figure in any one year could result from the play of chance. That chance could result in a persistent result of this nature however is highly improbable. In order to test the hypothesis that this unfavourable experience with regard to stillbirths is due to chance, one can apply certain statistical tests. By assuming that Barton does not differ from the surrounding countryside and working out overall rates for the three areas Barton, Brigg and Brigg Rural combined, the expected numbers of stillbirths for each area over a three year period can be obtained. So long as all these expected numbers are greater than 5 a valid Chi-square test of significance can be made. Last year, on the basis of two years statistics combined, such a test showed that the excess of stillbirths in Barton was just significant at the 2% level. A three column test on the combined figures for the past three years shows that the probability of so great a difference as that observed occurring by chance is less than one in a thousand. (chi-square = 14.98 n = 2 p = 0.001)

Last year I arranged for certain enquiries to be made in

connection with all future stillbirths in this and adjacent districts. In the course of a few years sufficient information may be accumulated in consequence for some clue to the cause of this high stillbirth rate to be gleaned. The amount of information available to date is too small for any opinion to be expressed.

Unfortunately a number of factors can account for differences in stillbirth rate, and information as to these is not available at present. It is known that maternal age is a factor, but in order to allow for this it would be necessary to have details of the age of every mother confined in the areas concerned over a period of years. Similarly women who have already had several babies are more prone to give birth to a dead child than are mothers of first or second babies. Here again allowance for birth rank can only be made if the information is available in respect of every confinement in the area.

Since it is not likely that Barton differs to any great extent from the surrounding districts in respect of the age or parity of mothers, it seems likely that some environmental influence is causing this persistently high stillbirth rate. Such a factor may be extremely difficult to demonstrate. It could possibly be related to infections or illnesses during pregnancy or to the drugs in treating these; to the kind of work done by the mother in pregnancy, to her dietary or recreational habits or to genetic factors. A rather complicated and detailed enquiry into many of these factors in respect of all mothers in the County was designed, but it was found that the collection of the necessary information would place too great a load on the County Council's staff to be practicable.

I hope, during the next year or so, however, to be able to collect information on a less ambitious scale in the hope of throwing some light on this matter.

Fortunately, during 1958 there were no infant Deaths in Barton-on-Humber. Consequently the Perinatal Mortality Rate shows an improvement on that recorded for the past two years. In spite of this, however, the Perinatal Mortality Rate remains 68% above the rate for England and Wales, and the overall position remains highly unsatisfactory.

With regard to infectious diseases, 1958 was a fortunate year. As you know, measles tends to occur every second year, and 1958 was the "free" year between epidemics. Only 6 cases occurred, and 4 of those occurred during the third quarter. The town was almost free of all other infections; but there were 9 cases of pneumonia. Eight of these occurred during the first quarter, and some may have been due to the tail-end of the Asian Influenza outbreak of late 1957. There was, however,

a minor epidemic of respiratory infection at the beginning of 1953, and the blood specimens which were sent to the laboratory from patients affected by this were all reported negative to all the virus. For this reason I suspect that these cases may have been primary bacterial ones. It is interesting to note that the age group involved comprised the young adults. You will see from the table on page 19 that 6 of the 9 cases occurred in people aged from 25 to 44. The sexes were evenly affected (4 males and 5 females).

Although no notifications of food poisoning were received, one family outbreak occurred. This only affected one family, a father, mother and their child. Cl. Welchii, an anaerobic germ common in the bowels of animals, was isolated from specimens from the people affected, and from the roast pork they had eaten. This pork had been kept in a warm place for some hours before cooking and had been cooked for too short a time at too high a temperature so that the meat in the centre of the joint was still raw when the outside was ready. The lessons to be learned from this are that joints of meat must be kept in a cool place to slow down the bacterial growth, and should be thoroughly cooked. Refrigerators can do much to prevent food poisoning.

Fortunately, all these cases were mild, and no medical treatment was required.

During the year some progress was made towards the long delayed sewage scheme for the town. The present arrangement whereby the town's sewage is discharged into the top of the Haven is most unhygienic and the new scheme for pumping sewage out into the Humber offers many advantages.

The scheme was modified during 1953 in order that properties at the lower end of the town might be included so that no untreated sewage will be discharged into the Haven in future. There was some objection to the original scheme, since it would have resulted in the Haven carrying almost no water, and silting would soon have resulted in the Haven ceasing to be navigable for barges, with resulting hardship to local industry. In its modified form the scheme permits fresh water from the Far Ings drain to continue to flow into the Haven, and the drainage board have arranged to increase the flow. Consequently there should only be benefit and no unfortunate repercussions when the work is eventually put in hand.

I regret to have to report, however, that in December, 1953, just when we felt that the scheme was finally ready, an unexpected snag was encountered. The Humber Conservancy Board wrote to say that they could not consent to the sewer outfall because this was beyond the "River Line" laid down in the Humber Conservancy Act of 1905. The mudbanks of the estuary shift constantly as a result of tidal action, and at present the low water mark is a

great distance further out than it was in 1905. As a result it would not be possible to discharge below the low water mark without a special Act of Parliament. The nearest point at which the present low water mark lies south of the "River Line" is at Chowder Ness, some mile and a quarter to the west of the proposed outfall. This means that there are three alternative possibilities, to pipe sewage to the Chowder Ness, to build a treatment plant and discharge above low water mark or to promote a private Bill in Parliament.

Shortly before this, the Lincolnshire River Board had written to inform the Council that they proposed to apply to the Ministry of Housing and Local Government for an order under the Rivers (Prevention of Pollution) Act, 1951, which would prevent new discharges of sewage into the Humber. They requested that treatment plant be included in the scheme. This would, of course, materially increase the cost and cause very considerable additional delay.

The delay incurred by amending the scheme to discharge at Chowder Ness would possibly mean that by the time the work was put in hand a treatment plant would be required. Consequently this solution to the problem seemed unwise. It may well be, therefore, that the installation of a partial treatment plant on the Humber Bank and an outfall above the low water mark will prove to be the answer. Before sabotaging the scheme completely, the Boards concerned might remember that any scheme which results in sewage being pumped into tidal water at high tide, so that it will be carried clear out to sea by the ebb, is to be preferred to the present arrangement whereby flap valves prevent discharge until the tide is low with the result that much of the sewage is carried well up the estuary on the flood, and may ebb and flow with the tides for days before reaching the sea. The original scheme for pumping would thus have reduced the present pollution of the Humber. Provision had been made for the eventual construction of partial treatment plant at a later date should it be decided to take measures to reduce pollution of the Humber. The final result of the original scheme would thus have been better than that of the modified scheme which we may eventually get. Even partially treated sewage is offensive, having a high biological oxygen demand, and it is therefore better discharged well out into the estuary rather than close to the bank.

The Humber is a very muddy estuary having very fierce tides. By its nature it is unsuitable for bathing and Public Health dangers of faecal pollution are less than in other estuaries. Heavy pollution from a population 5 to 10 times larger than that of Barton on the north bank of the estuary renders the water unsuitable for most fishes. It is, therefore, sad that steps to remove a Public Health risk to human beings should be delayed in a somewhat forlorn hope of improving conditions for fish. This

is an attitude typical of England where of the Societies for the Prevention of Cruelty, it is the one protecting animals which receives Royal patronage and not the society concerned with Children!

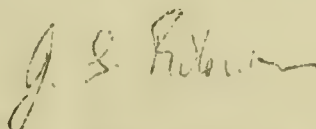
We were unfortunate in losing the services of Mr. Rhodes, the Public Health Inspector, towards the end of May, 1958, when he was appointed to a better position in Yorkshire. He had served the town well for 4 years. During this time the bulk of the slum clearance programme was carried through by means of clearance area procedure. The smoothness with which this programme was carried out is a tribute to the thoroughness of his work.

After an interval of three weeks when we were without an Inspector, Mr. Kirk took up his duties, and has rapidly settled down to tackle the problems of the district. Let us hope that he will enjoy life in this town and remain here for many years. It takes a considerable time for an Inspector to become thoroughly familiar with his district, and his value increases with improved local knowledge. In the short time he has been in the area Mr. Kirk has proved his ability by re-organising the refuse collection service so that now with a reduced staff, we have a 5 day collection and for the first time since I came to the district there are no complaints. A good refuse collection service not only prevents nuisance and complaint due to accumulations of refuse, overfull dustbins and inconvenience to householders, but also makes a real contribution to Public Health. Flies can breed in refuse, and if refuse is always removed before these insects can complete their life-cycle, the risk of fly-born infections is appreciably reduced. The former irregular service not only resulted in dustbins remaining unemptied long enough for flies to mature, but also caused people to put out supplementary containers to take the excess when dustbins were full. Such containers lacking lids were sources of food for flies.

The whole town has reason to be grateful to Mr. Kirk and to the Refuse Collection team for this improved service. If Mr. Kirk is as successful with the other problems he tackles, we shall be most fortunate.

I am indebted to Mr. Kirk for his report which is included herewith.

I am,
Your obedient Servant,



Medical Officer of Health.

VITAL STATISTICS

	<u>1956</u>	<u>1957</u>	<u>1958</u>
Mid Year Populations.	6420	6420	6410
Live Births.	101	104	95
Stillbirths.	8	5	6
Infant Deaths under 4 weeks of age.	3	3	0
Total Deaths.	86	89	77

	<u>Legitimate</u>			<u>Illegitimate</u>			<u>Total</u>
	<u>Male</u>	<u>Female</u>	<u>Total</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>	
Live Births.	47	45	92	1	2	3	95
Stillbirths.	3	3	6	—	—	—	6
Infant Deaths under 4 weeks of age.	—	—	—	—	—	—	—
Infant Deaths under 1 year of age.	—	—	—	—	—	—	—

	<u>Barton</u> <u>1958</u>	<u>Barton</u> <u>1957</u>	<u>England & Wales</u> <u>1957</u>
Crude Birth Rate (per 1000 pop)	<u>14.8</u>	16.25	16.1
+ Corrected Birth Rate (per 1000 pop).	<u>15.1</u>	16.6	(16.1)
Stillbirth Rate (per 1000 <u>total</u> births).	<u>59.4</u>	45.9	22
Infant Mortality Rate (per 1000 <u>live</u> births).	<u>0</u>	28.9	23
Neonatal Mortality Rate (per 1000 <u>live</u> births).	<u>0</u>	28.9	16
Perinatal Mortality Rate (per 1000 <u>total</u> births).	<u>59.4</u>	73.4 ^x	35.8
Illegitimacy Rate (per 100 <u>total live</u> births.)	<u>3.2</u>	3.8	4.8
Crude Death Rate (per 1000 pop)	<u>12.0</u>	13.9	11.5
+ Corrected Death Rate.	<u>11.6</u>	12.9	(11.5)

+ These corrections take account of the different proportions of old and young people in the area, and make the corrected rate comparable with that for England and Wales and the corrected rates for other areas. Without such correction health resorts to which old people retire would show alarmingly high death rates, and low birth rates. The comparability factors used to calculate these rates are for Barton 1.02 for Births and 0.92 for deaths.

* The perinatal mortality rate for Barton in 1957 was based on deaths under the age of 4 weeks and stillbirths and is not truly comparable with the other perinatal mortality rates shown which are based on deaths in the first week of life and stillbirth.

Particulars of immunisations and vaccinations
carried out in the Barton-upon-Humber Urban District during 1958.

	Under five years of age at date of immunisation.	Between five and fourteen years of age at date of immunisation.	Boosting Doses.
Diphtheria Immunisation.	2	20	37

	Under 1	1	2	3	4	5 - 9	10 - 14	Total
Diphtheria and Whooping Cough Immunisation.	32	5	-	-	-	-	-	37
Diphtheria Tetanus and Whooping Cough Immunisation.	14	12	-	-	1	-	-	27
Diphtheria Tetanus Immunisation.	-	-	-	-	-	-	-	-
Whooping Cough Immunisation.	-	-	1	-	-	-	-	1
Whooping Cough and Tetanus Immunisa- tion.	-	-	-	-	-	-	-	-

Smallpox.

Vaccination
Re-Vaccination

	Under 1	1 - 4	5 - 14	15 or over	Total
Vaccination	40	9	-	5	54
Re-Vaccination	-	-	-	1	1

Tetanus.

Vaccination
Booster

	Under 1	1 - 4	5 - 14	15 or over	Total
Vaccination	-	-	-	1	1
Booster	-	-	-	4	4

CAUSES OF DEATH IN THE DISTRICT IN 1958.

This table gives the causes of death in accordance with the abbreviated list of 36 groups of the World Health Organisation Nomenclature Regulations, 1948.

Causes of Death					Male	Female
1.	Tuberculosis, respiratory	..	..	..	—	—
2.	Tuberculosis, Other	..	..	..	—	—
3.	Syphilitic disease	..	..	..	—	—
4.	Diphtheria	..	..	..	—	—
5.	Whooping Cough	..	..	..	—	—
6.	Meningococcal infections	..	..	..	—	—
7.	Acute Poliomyelitis	..	..	..	—	—
8.	Measles	..	..	..	—	—
9.	Other infective and parasitic diseases					
10.	(Malignant neoplasm, stomach	..	..		3	—
11.	(Malignant neoplasm, lung, bronchus.				—	1
12.	* (Malignant neoplasm, breast	..	..		—	—
13.	(Malignant neoplasm, uterus	..	..		—	—
14.	(Other Malignant & Lymphatic neoplasms.				10	1
15.	Leukaemia, aleukaemia	..	..	..	—	—
16.	Diabetes	..	..	..	—	—
17.	Vascular lesions of nervous system	..			5	9
18.	Coronary disease, angina	..	...	..	7	5
19.	Hypertension with heart disease	..			—	4
20.	Other heart disease	..	..	..	5	12
21.	Other circulatory disease	..	..	..	1	2
22.	Influenza	..	..	..	—	—
23.	Pneumonia	..	..	..	—	1
24.	Bronchitis	..	..	..	—	—
25.	Other diseases of the respiratory system.				—	—
26.	Ulcer of the stomach and duodenum	..			1	—
27.	Gastritis, enteritis and diarrhoea	..			—	—
28.	Nephritis and nephrosis	..	..	..	—	—
29.	Hyperplasis of prostate	..	..	..	1	—
30.	Pregnancy, childbirth and abortion	..			—	—
31.	Congenital malformations	..	..	..	—	—
32.	Other defined and ill-defined diseases.				1	6
33.	Motor vehicle accidents	..	..	..	—	—
34.	All other accidents	..	..	..	1	—
35.	Suicide	..	..	..	1	—
36.	Homicide and operations of war	..	..		—	—
Total:					36	41

* Malignant neoplasm means cancer.

TABLE OF NOTIFICATIONS OF INFECTIOUS AND OTHER DISEASES
BY AGE GROUPS.

DISEASE	0+	1+	2+	3+	4+	5+	10+	15+	25+	45+	65+	Total
Measles (exc. rubella)	-	2	1	-	1	1	1	-	-	-	-	6
Whooping Cough	-	-	-	-	1	-	-	-	-	-	-	1
Scarlet Fever	-	-	-	-	-	-	-	-	-	-	-	-
Ac. Poliomyelitis (P)	-	-	-	-	-	-	-	-	-	-	-	-
Ac. Poliomyelitis (N.P.)	-	-	-	-	-	-	-	-	-	-	-	-
Smallpox	-	-	-	-	-	-	-	-	-	-	-	-
Diphtheria	-	-	-	-	-	-	-	-	-	-	-	-
Dysentery	-	-	-	-	-	-	-	-	-	-	-	-
Meningococcal Infection	-	-	-	-	-	-	-	-	-	-	-	-
Ac. Pneumonia	-	-	-	-	1	-	-	-	6	1	1	9
Ac. Encephalitis (Inf.)	-	-	-	-	-	-	-	-	-	-	-	-
Ac. Encephalitis (Post inf.)	-	-	-	-	-	-	-	-	-	-	-	-
Enteric Fever	-	-	-	-	-	-	-	-	-	-	-	-
Paratyphoid Fever	-	-	-	-	-	-	-	-	-	-	-	-
Erysipelas	-	1	-	-	-	-	-	-	-	-	-	1
Food Poisoning	-	-	-	-	-	-	-	-	-	-	-	-
Tuberculosis Respiratory	-	-	-	-	-	-	-	-	1	-	-	1
Tuberculosis Meninges & C.N.S.	-	-	-	-	-	-	-	-	-	-	-	-
Tuberculosis Other	-	-	-	-	-	-	-	-	-	-	-	-
Total:	-	3	1	-	3	1	1	-	7	1	1	18

FOOD POISONING

	Quarter				Total
	1	2	3	4	
1. Food poisoning notifications as returned to the Registrar General.	Nil	Nil	Nil	Nil	Nil
2. Cases otherwise ascertained.	Nil	3	Nil	Nil	3
3. Fatal cases.	Nil	Nil	Nil	Nil	Nil

4. Particulars of outbreaks.

	No. of outbreaks		No. of cases		Total number of cases.
	Family Out-breaks	Other Out-breaks	Notified	Other-wise ascertained.	
Agent identified +	1 (e)	—	—	3 (e)	3 (e)
Agent not identified	—	—	—	—	—

5. Single cases.

Number of single cases notified or otherwise ascertained — Nil

6. Salmonella infections, not food-borne.

Number of cases (outbreaks and single cases) notified or otherwise ascertained. — Nil

+ Classified according to agents:—

- | | |
|----------------------|--------------------|
| (a) Chemical Poisons | (d) Cl. botulinum |
| (b) Salmonella | (e) Cl. Welchii |
| (c) Staphylococci | (f) Other bacteria |

Statistics and General Information.

Mid year population	6,410
Area of town	6,343 acres of land and inland waters. 838 acres (tidal waters)

	<u>1957-58</u>			<u>1958-59</u>		
	£.	s.	d.	£.	s.	d.
Rateable Value	54,775.	0.	0.	55,677.	0.	0.
Product of a penny rate.	215.	10.	0.	220.	13.	6.
Number of inhabited houses.	2,300.					

The principal industries are the manufacture of Bicycles, Ropes, Chemicals, Bricks, Tiles and Malt. There are also a shipyard and an instrument making firm, and a number of smaller undertakings.

A number of residents in the town work at a cement works just outside the district, and some travel to Scunthorpe to work in the steel industry.

Health Services.

The general practitioners service is provided by six doctors in partnership, who have established a new central clinic. A General Hospital, a Maternity Hospital and an Isolation Hospital are provided by the Regional Hospital Board at Scunthorpe.

Home Nursing Services, Health Visitors and Midwifery Services are provided by the County Council. Maternity and Child Welfare Clinics and School Health Service General, Ophthalmic and Speech Therapy Clinics are all held at the Lindsey County Council premises at 50, Holydyke.

The town is served by the Public Health Laboratory at Lincoln. Ambulances are stationed at premises in Holydyke, and are provided by the Lindsey County Council.

Water Supplies.

Water is supplied to Barton from deep wells by the North Lindsey Water Board. Coming from a chalk stratum, the water was hard. To remedy this the Water Board installed Base-exchange softening plant which came into operation during the year. As a result the town now enjoys an excellent supply of soft water. The water is chlorinated before distribution, and its bacteriological condition after treatment is excellent.

ANNUAL REPORT OF PUBLIC HEALTH INSPECTOR, 1958.

I submit for your consideration the Annual Report for 1958, my duties commencing on the 16th June.

1. HOUSING.

The statistical details relating to dwellinghouses are as follows:-

Total number of new houses erected during the year ..	52
(a) By the Local Authority	34
(b) By other Local Authorities	-
(c) By other bodies or persons	18
Inspection of dwellinghouses during the year.	
(i) (a) Total number of dwellinghouses inspected for Housing defects (under Public Health or Housing Acts)	120
(b) Number of inspections made for the purpose . . .	283
(ii) (a) Number of dwellinghouses (included under Sub-Head (i) above) which were inspected and recorded under the Housing Consolidated Regulations 1925	52
(b) Number of inspections made for the purpose . . .	99
(iii) Number of dwellinghouses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	12
(iv) Number of dwellinghouses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation. ..	56
Remedy of Defects during the year without the service of Formal Notice.	
Number of defective dwellinghouses rendered fit in consequence of informal action by the Local Authority of their Officers	39
Action under Statutory Powers during the year.	
(a) Proceedings under the Public Health Acts:-	
(1) Number of dwellinghouses in respect of which notices were served requiring defects to be remedied	7
(2) Number of dwellinghouses in which defects were remedied after service of Formal Notices:-	
(a) By owners	1
(b) By Local Authority in default of owners . . .	0

Housing contd.

(b) Proceedings under Section 9 of the Housing Act 1957.

(1) Number of dwellinghouses in respect of which notices were served requiring repairs	0
(2) Number of dwellinghouses which were rendered fit after service of formal notices	0
(a) By Owners	0
(b) By Local Authority in default of owners ..	0

(c) Proceedings under Sections 16 and 17 of the Housing Act 1957

(1) Number of dwellinghouses in respect of which Demolition Orders were made	9
(2) Number of dwellinghouses demolished in pursuance of Demolition Orders	0
(3) Number of dwellinghouses subject to undertaking or Closing Orders	4

(d) Proceedings under Section 42 of the Housing Act, 1957.

(1) Number of Clearance Orders made	6
(a) Number of Persons displaced	63
(b) Number of Families displaced	26
(2) Number of dwellinghouses demolished in pursuance thereof	0

Slum Clearance Programme.

As a means of approaching the formidable task of dealing with sub-standard houses still occupied as a result of the war years, local authorities were required to prepare a programme which would cater for the worst dwellings in the 5 years ending with 1960.

During 1958 it was found that some houses in the list of properties to be considered under the Housing Act with a view to slum clearance, were capable of being made fit at reasonable cost. As a result of the Council's action many of these are being improved and 26 houses were removed from the programme.

Because tenants from Clearance Areas found other private accommodation 12 new houses intended for these people became available for others.

This produced the effect of speeding the remainder of the programme and, at the end of 1958, only 5 houses in the programme remain occupied. In 4 cases the tenants do not wish to leave their present accommodation and the fifth has been represented for consideration by the Council.

Housing Act, 1949. Improvement Grants.

Fifteen applications were approved during the year.

2. FOOD INSPECTION AND FOOD PREMISES.

Food Premises. List of Food Premises in the district:—

<u>Type of Business.</u>	<u>Number.</u>
Grocery and Provisions Shops.	30
Butchers Shops.	7 — Registered under Section 16 of the F. & D.A. 1955.
Fish Shops.	7
Bakehouses.	4
Greengrocers Shops.	3
Cafes.	3
Sweet Shops, Chemists, etc.	17
Licensed Premises.	15
Ice Cream Vendors.	20 — Registered under Section 16 of the F. & D.A. 1955.

Twenty two inspections were made of registered premises.

MILK SUPPLIES.

Number of Dealers Licences issued authorising the use of the Special Designation "Sterilised"	23
Number of Dealers Licences issued authorising the use of the Special Designation "Pasteurised" . ..	3
Number of Supplementary Licences issued authorising the use of the Special Designation "Pasteurised"	3
Number of Supplementary Licences issued authorising the use of the Special Designation "Tuberculin Tested" (Pasteurised)	3

MEAT INSPECTION.

Four private slaughterhouses are in operation.

The following table gives details of meat inspection work carried out during 1958.

MEAT INSPECTION contd.

Carcases Inspected and Condemned in Whole or in Part.

	<u>Cattle</u> <u>excl.</u> <u>Cows</u>	<u>Cows</u>	<u>Calves</u>	<u>Sheep</u> <u>and</u> <u>Lambs</u>	<u>Pigs.</u>
Number Killed	513	0	0	839	1406
Number Inspected	513	0	0	839	1406
All diseases except Tuberculosis:-					
Whole carcasses condemned.	-	-	-	1	2
Carcases of which some part or organ was condemned.	131	-	-	37	53
Percentage of number inspected affected with disease other than Tuberculosis					
	25.5%	-	-	4.5%	3.9%
Tuberculosis only:-					
Whole carcasses condemned.	-	-	-	-	1
Carcases of which some part or organ was condemned.	46	-	-	-	63
Percentage of the number inspected affected with Tuberculosis					
	9.0%	-	-	-	4.5%

No cases of C. bovis were found during the year.

Disposal of Condemned Foods.

Condemned meat is recovered from the slaughterhouse by the Council, stained green and sold to a processor.

Small quantities of other foods which are condemned are buried in the Council's controlled tip.

Administration of the Factories Acts 1937 and 1948

3. 1. Inspection for the purposes of provisions as to health.

Premises	No. of Premises in Register	No. of Inspection	No. of Written Notices	No. of occupiers Prosecuted
(1) Factories in which Sections 1,2,3,4 and 6 are to be enforced by Local Authorities.	6	—	—	—
(11) Factories not included in (1) in which Section 7 is enforced by the Local Authority.	35	2	1	—
(111) Other premises in which Section 7 is enforced by the Local Authority (excluding outworkers' premises).	2	—	—	—
Total:	43	2	1	—

2. Cases in which Defects were found.

Particulars	No. of Defects Found	No. of Defects Remedied	No. of Defects Referred to by H.M.I. H.M.I.		No. of Defects in respect of which prosecutions were instituted.
Want of cleanliness (sec 1)	—	—	—	—	—
Overcrowding (sec 2)	—	—	—	—	—
Unreasonable temperature (sec 3)	—	—	—	—	—
Inadequate ventilation (sec 4)	—	—	—	—	—
Ineffective drainage of floors (sec 6)	—	—	—	—	—
Sanitary Conveniences (sec 7)					
(a) Insufficient	—	—	—	—	—
(b) Unsuitable or defective	1	1	—	1	—
(c) Not separate for sexes.	—	—	—	—	—
Other offences against the Act (not incl. offences relating to outwork)	—	—	—	—	—
Total:	1	1	—	1	—

Outwork - Sections 110 and 111.

No outworkers were reported in the Urban District during the year.

4. WATER SUPPLIES.

No. of houses with main supply in house (estimated)	Population (estimated)	No. of houses served by stand pipes (estimated)	Population (estimated)
1792	4928	512	1408

Number of houses supplied from private sources:

in house 12
not in house .. 51

Samples taken for bacteriological examination:

	Class 1 (Excellent)	Class 2 (Satis- factory)	Class 3 (Doubt- ful)	Class 4 (unsatis- factory)
<u>Private supplies</u>	0	10	0	2
<u>Public supply</u>				
Before Chlorination	66	16	1	2
After Chlorination	34	1	0	0

5. GENERAL SANITATION.

Nuisances.

Total number of nuisances during the year:

(a) Abated as result of informal action by Public
Health Inspector ... 39
(b) Reported to Council - Statutory Notice issued. 7

Details of Nuisances Abated:-

Foul ditches, ponds and stagnant water 0
Drainage 30
Dangerous Premises 0
Miscellaneous Nuisances 10

Disinfection and Disinfestations.

Rooms or premises disinfected - Tuberculosis .. 0
Number of premises subject to disinfestation .. 3

Sewerage.

Shortly after my appointment, it was pointed out by the County Council that part of the 50% grant towards my salary would cease to be paid if I continued to be responsible for the town's sewers. This duty was then transferred to the Engineer & Surveyor by resolution of the Council.

Sanitary Accommodation.

Number of houses with pail closets in district	102
Number of pail closets renewed	10
Number of houses with water closets in district . ..	2202
Number of water closets substituted for pail closets.	22

Rodent Control.

Details of the number of premises treated for rats and mice are shown below:-

Dwellinghouses	53
Other Premises	22

Sewers in the district were treated on one occasion during the year.

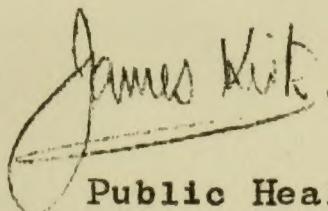
Refuse Collection and Disposal.

It is with great pleasure that I report on the improvements made to this service.

During October, the Council purchased a Shelvoke and Drewry fore and aft tipper freighter, a larger capacity vehicle than had previously been used. This alone would not have produced a weekly collection of refuse at any but the most optimum times of the year. Bad weather, Bank Holidays and heavier loads of refuse in winter have the effect of slowing or stopping the collection of refuse and provision had to be made to meet these difficulties.

Accordingly, the Council resolved to provide protective clothing for the men employed on this work, to pay a sliding scale of incentive bonuses designed to stimulate effort when it was most needed and agreed to make certain other changes to the system of collection and disposal.

The new scheme went into operation with the arrival of the freighter on the 23rd October. A five day collection was maintained for the remainder of the year and, for the first time, in the week following the Christmas holiday, the town was cleared of refuse. These alterations, the new vehicle and, above all, the willing co-operation of the refuse collection team, have combined to provide a first class service and at no extra annual cost.



Public Health Inspector.

